

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: 02263701 A

(43) Date of publication of application: 26 . 10 . 90

(51) Int. Cl. C01B 3/40
B01J 23/74

(21) Application number: 01086661

(22) Date of filing: 04 . 04 . 89

(71) Applicant: OSAKA GAS CO LTD OSAKA
GAS ENG KK(72) Inventor: TAKAMI SUSUMU
OOKA ISAMI
KUMAGAI TATSUO(54) PRODUCTION OF GAS BY PARTIAL
COMBUSTION

(57) Abstract:

PURPOSE: To eliminate the slip of unreacted gas and to obtain a gas having a low content of N_2 , low sp.gr. and a high calorific value by allowing 26C hydrocarbons to react with an oxygen-contg. gas and steam in the presence of a specified catalyst.

CONSTITUTION: The 26C hydrocarbons are vaporized and superheated in a raw material preheater E, and supplied through a line 1 to a reactor A packed with a catalyst obtained by depositing NiO on a carrier consisting essentially of MgO and produced by a dipping process. Meanwhile, an oxygen-contg. gas supplied from a blower H is saturated with water in a saturation tower F and added with steam, and the gaseous mixtures are heat-exchanged with a gaseous reaction product in a superheater B and supplied to the reactor A from a line 3. The gaseous mixtures are preheated to 350°C and mixed at the inlet of a reforming catalyst bed packed in the reactor A, allowed to react with each other so that the temp. at the outlet of the catalyst bed is controlled to 500 to 700°C . The waste heat of the reaction product is recovered in the superheater B, a waste heat boiler D and the preheater E, and the

reaction product passes through a CO converter and is cleaned in a water-sealed scrubber G.

COPYRIGHT: (C)1990,JPO&Japio

